

1 Claims

2 **I claim:**

3 1. A spray paint gun comprising

4 a gun body having a male thread, and

5 an air nozzle ring having female thread, the female thread being adapted to be

6 screwed onto the male thread,

7 wherein the thread is a trapezoid thread having a flank angle in the range of about

8 +/- 20% of 30°, wherein the diameter of the thread is between about 30 and about 40 mm

9 and wherein

10 a. the thread height is within the range of about +/- 20% of 1.1 mm,

11 b. the root to crest clearance is within the range of about +/- 20% of 0.1 mm,

12 c. the flank clearance is within the range of about +/- 20% of 0.15 mm.

13 2. A spray gun according to claim 1, wherein the pitch is in the range of about +/-

14 20% of 2.5 mm.

15 3. A spray gun according to claim 1 , wherein the core diameter and the outer

16 diameter of the male thread of the gun body have a tolerance in the range of about +/-

17 20% of -0.05 mm, respectively.

- 1 4. A spray gun according to claim 2, wherein the core diameter and the outer
2 diameter of the male thread of the gun body have a tolerance in the range of about +/-
3 20% of -0.05 mm, respectively.
- 4 5. A spray gun according to claim 1, wherein the core diameter and the outer
5 diameter of the female thread of the air nozzle ring have a tolerance in the range of about
6 +/- 20% of +0.1 mm, respectively.
- 7 6. A spray gun according to claim 2, wherein the core diameter and the outer
8 diameter of the female thread of the air nozzle ring have a tolerance in the range of about
9 +/- 20% of +0.1 mm, respectively.
- 10 7. A spray gun according to claim 3, wherein the core diameter and the outer
11 diameter of the female thread of the air nozzle ring have a tolerance in the range of about
12 +/- 20% of +0.1 mm, respectively.
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- 14
- 15 8. A spray gun according to claim 4, wherein the core diameter and the outer
16 diameter of the female thread of the air nozzle ring have a tolerance in the range of about
17 +/- 20% of +0.1 mm, respectively.

1 9. A spray gun according to claim 2, wherein the pitch has a tolerance in the range of
2 about +/- 20% of +/- 0.1 mm.

3 10. A spray gun according to claim 1, wherein the nominal diameter of the trapezoid
4 thread is about 38 mm.

5 11. A spray gun according to claim 2, wherein the nominal diameter of the trapezoid
6 thread is about 38 mm.